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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,532	04/21/2004	Dan Raphacli	12407.0069	7317
25937 ZARETSKY &	7590 06/25/2007 ASSOCIATES PC	•	EXAMINER	
8753 W. RUNION DR. PEORIA, AZ 85382-6412			. CORRIELUS, JEAN B	
PEURIA, AZ 8	3382-0412		ART UNIT	PAPER NUMBER
			2611	
•		•		
		,	MAIL DATE	DELIVERY MODE
			06/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		, K				
	Application No.	Applicant(s)				
	10/829,532	RAPHAELI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Jean B. Corrielus	2611				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 21 Ap	oril 2004.					
	action is non-final.					
3) Since this application is in condition for allowar closed in accordance with the practice under E	·					
Disposition of Claims						
4)⊠ Claim(s) <u>1-22</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5)⊠ Claim(s) <u>13-22</u> is/are allowed.						
6)⊠ Claim(s) <u>1-12</u> is/are rejected.	6)⊠ Claim(s) 1-12 is/are rejected.					
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct		,				
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:	priority under 35 U.S.C. § 119(a)	)-(d) or (f).				
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date <u>8÷12</u> -04	6) Other:					

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Let's consider claim 1, the claim when taken as a whole is directed to the "generation of a start packet synchronization sequence". The "start packet synchronization sequence" is nothing but "a signal" per se. A "signal per se" is an abstract idea and does not fall within any of the statutory classes of invention. The "Interim Guidelines for examination of Patent Applications for Patent subject matter Eligibility" provides that for claims including such excluded matter to be eligible, the claim must be for a practical application of the abstract idea. The claim fails to provide a practical application that produces a practical result because the final result, the mere generation of a plurality of symbol each separated by a predetermined signal, a signal per se, achieved by the claimed invention is not useful tangible and concrete. Hence, it is concluded that the claim is non-statutory.

The same analysis applies to claim 10.

Claims 2-9, 11 and 12 fail to cure the deficiency noted in the base claim, they are likewise rejected.

### Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites that the method is implemented in an application specific integrated circuit. It is unclear as to how the method can be implemented in ASIC since the method does not include any hardware. The same analysis applies to claim 9.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 5. Claims 1 and 2 are rejected under 35 U.S.C. 102(e) as being anticipated by park et al US patent No. 6,865,177.

As per claim 1, Park et al discloses a method and apparatus fig. 12 comprising a sequence generator 1211 for generating a plurality of sync symbols see col. 12, lines 51-55 to be transmitted in said sync sequence; generating a plurality of delay signals "N-1 predetermined signals" using a plurality of delay devices see fig. 12; inserting a delay signal after each sync symbol see fig. 12, as shown in fig. 12, N is a positive integer.

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As per claim 2, the predetermined signals comprises time delays see fig. 12.

### Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 3 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al US patent No. 6,865,177.

As per claim 3, as applied to claim 1 above, park teaches every feature of the claimed invention but does not explicitly teach the further limitation of "N equals to seven". However, it would have been obvious to one skill in the art to set the number of signals to 7 in order to satisfy system requirements.

As per claim 6, it would have been obvious to one skill in the art to sync sequences wherein each sync sequence would corresponds to a different packet type so as to provide the enhance capability to process different type of signals such as voice and data.

As per claim 7, it would have been obvious to one skill in the art to include a zero shifted code shift keying modulated symbol in each symbol so as to shape the signal in a format suitable for transmission to a remote station.

### Allowable Subject Matter

8. Claims 13-22 are allowed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Corrielus whose telephone number is 571-272-.

3020. The examiner can normally be reached on Maxi-Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Lean B Corrielus Primary Examiner Art Unit 2611

6-21-07